

AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF THE CLAIMS

1. (Currently Amended) A wire feeder for an electric arc welder comprising a set of feed rolls driven by a DC motor with a commutator, first and second opposite polarity leads receiving power to drive said motor, and having a first brush at a given position on said commutator and connected to said first lead, a second brush circumferentially spaced from said first brush a first annular distance around said commutator and connectable to said second lead to cause said motor to rotate at a first speed to drive said rolls at a first speed, a third brush circumferentially spaced from said first brush a second annular distance around said commutator and connectable to said second lead to cause said motor to rotate at a second speed to drive said rolls at a second speed, and a switching circuit with an operative condition to connect said second lead to only a selected one of said second and third brushes to the exclusion of the other one of said second and third brushes.

2. (Currently Amended) A wire feeder as defined in claim 1 wherein said switching circuit is operated manually.

3. (Currently Amended) A wire feeder as defined in claim 1 including a controller with a first output signal causing said switching circuit to select said second brush and a second signal causing said switching circuit to select said third brush.

4. (Original) A wire feeder as defined in claim 3 wherein said controller output signal is caused by an input signal indicative of wire size.

5. (Original) A wire feeder as defined in claim 4 wherein said wire feeder includes a fixed ratio gear reducer between said motor and said feed rolls.

6. (Original) A wire feeder as defined in claim 3 wherein said wire feeder includes a fixed ratio gear reducer between said motor and said feed rolls.

7. (Original) A wire feeder as defined in claim 2 wherein said wire feeder includes a fixed ratio gear reducer between said motor and said feed rolls.

8. (Original) A wire feeder as defined in claim 1 wherein said wire feeder includes a fixed ratio gear reducer between said motor and said feed rolls.

9. (Original) A wire feeder as defined in claim 8 wherein said switching circuit when in the condition to select said second brush has a time delay for selecting said third brush for a time before selecting said second brush.

10. (Original) A wire feeder as defined in claim 3 wherein said switching circuit when in the condition to select said second brush has a time delay for selecting said third brush for a time before selecting said second brush.

11. (Original) A wire feeder as defined in claim 2 wherein said switching circuit when in the condition to select said second brush has a time delay for selecting said third brush for a time before selecting said second brush.

12. (Original) A wire feeder as defined in claim 1 wherein said switching circuit when in the condition to select said second brush has a time delay for selecting said third brush for a time before selecting said second brush.

13. (Original) A wire feeder as defined in claim 12 including a circuit to latch said switch circuit in said operative condition when power is received by said leads.

14. (Original) A wire feeder as defined in claim 8 including a circuit to latch said switch circuit in said operative condition when power is received by said leads.

15. (Original) A wire feeder as defined in claim 3 including a circuit to latch said switch circuit in said operative condition when power is received by said leads.

16. (Original) A wire feeder as defined in claim 2 including a circuit to latch said switch circuit in said operative condition when power is received by said leads.

17. (Original) A wire feeder as defined in claim 1 including a circuit to latch said switch circuit in said operative condition when power is received by said leads.

18. (Currently Amended) A wire feeder for an electric arc welder comprising a set of feed rolls driven by a motor and a switching ~~condition~~ circuit to change the speed of said motor between a first and second speed, said motor having a commutator with a first brush at a given position on said commutator and connected to a first lead of first and second opposite polarity leads that receive power from said commutator to drive said motor, said commutator with a second brush circumferentially spaced from said first brush a first annular distance around said commutator and a third brush circumferentially spaced from said first brush a second annular distance around said commutator that is different than said first annular distance, said switching circuit alternately connecting a second lead of said first and second opposite polarity leads to said second and third brushes, said motor at said first speed when said second lead is connected to said second brush and at said second speed when said second lead is connected to said third brush.

19. (Currently Amended) A wire feeder as defined in claim 18 wherein said switching circuit is operated manually.

20. (Original) A wire feeder as defined in claim 19 wherein when said switching circuit selects said first speed a circuit selects said second speed for a time to accelerate said feed rolls for said time.

21. (Cancelled)

22. (Original) A wire feeder for an electric arc welder comprising a set of feed rolls driven by a D.C motor with a commutator, first and second opposite polarity leads receiving power to drive said motor and having a first brush at a given position on said commutator and connected to said first lead and a second brush circumferentially spaced from said first brush an annular distance around said commutator and connected to said second lead and a device to change the annular distance to change the speed of said motor driving said feed rolls.